

EDAM[®]

Enterprise Document Assessment Methodology

Global Utilities Office & Production Documents Costs

The data represented in this report is summarized for simplicity. It is based on our independent assessments, research and computational analysis encompassing more than 250 published government, academic, and industry research data sources.

We studied 150 global utility companies staffed by 4,458,942 full-time equivalent employees, that during 2018 produced some 19.9 billion office and 12.4 billion production documents respectively, with a combined predicted fully burden cost just over \$18.8 billion dollars.

This document is intended for discussion purposes and hopefully you are intrigued to learn more.

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EDAM® Top 25 Global Office & Production Document Costs

For definition, global Utility companies sell power (electricity & gas) through a regulated market structure by operating generation, transmission and distribution facilities. In most countries, utilities are essential for many industrial and commercial enterprises, as well as households, government, education, and public recreational facilities. These Top 25 global utilities generated \$1.28 Trillion in revenues, and employ 2,974,183 full-time equivalent employees (FTE).



1,720,000
Employees
FTE



7,143,210,127
Office Documents
Produced



2,483,933,649
Production Documents
Produced



\$ 6,778,586,818
Total Document
Costs



中国南方电网
CHINA SOUTHERN POWER GRID



300,000
Employees
FTE



872,136,120
Office Documents
Produced



779,840,253
Production Documents
Produced



\$ 957,591,430
Total Document
Costs



152,033
Employees
FTE



650,632,273
Office Documents
Produced



466,164,663
Production Documents
Produced



\$ 712,499,715
Total Document
Costs



150,000
Employees
FTE



261,576,821
Office Documents
Produced



340,309,377
Production Documents
Produced



\$ 574,812,664
Total Document
Costs



62,900
Employees
FTE



309,857,878
Office Documents
Produced



193,109,158
Production Documents
Produced



\$ 293,655,927
Total Document
Costs

EDAM® Top 25 Global Office & Production Document Costs

The power business is in the midst of a transformational change, driven by technological and competitive forces. New technologies are expanding opportunities to improve operational efficiencies and prompting significant investment into new processes. One example; by the end of FY 2018 the cost of installing 750 million smart meters will cost \$100 billion, but the financial benefits to utility co.'s are nearly \$160 billion, says the WSJ .



59,547
Employees
FTE



322,212,466
Office Documents
Produced



196,727,209
Production Documents
Produced



\$ 303,045,610
Total Document
Costs



54,820
Employees
FTE



182,135,246
Office Documents
Produced



114,002,247
Production Documents
Produced



\$ 172,838,200
Total Document
Costs



53,962
Employees
FTE



224,105,758
Office Documents
Produced



140,272,465
Production Documents
Produced



\$ 212,666,338
Total Document
Costs



42,669
Employees
FTE



226,896,475
Office Documents
Produced



138,337,962
Production Documents
Produced



\$ 213,182,756
Total Document
Costs



42,060
Employees
FTE



229,375,009
Office Documents
Produced



140,730,135
Production Documents
Produced



\$ 215,820,123
Total Document
Costs

EDAM® Top 25 Global Office & Production Document Costs

According to our friends at KPMG, during a 2018 survey of global utility companies CEO's 48% showed concern that becoming the victim of a cyber-attack is a matter of "when" and not "if". Continuing, 58% surveyed said their utility is prepared to identify a threat to access their networks & data, and only 63% said they could contain the impact of a breach to strategic operations. Regulators are increasing their inspections and fining utilities to prompt more attention to shoring up security - workplace, site operations, and 3rd. party servicers.



34,621
Employees
FTE



191,389,243
Office Documents
Produced



115,217,655
Production Documents
Produced



\$ 179,506,297
Total Document
Costs



34,255
Employees
FTE



168,817,210
Office Documents
Produced



104,802,860
Production Documents
Produced



\$ 159,480,818
Total Document
Costs



32,000
Employees
FTE



182,518,699
Office Documents
Produced



109,878,132
Production Documents
Produced



\$ 171,228,403
Total Document
Costs



31,344
Employees
FTE



183,236,627
Office Documents
Produced



113,196,604
Production Documents
Produced



\$ 172,809,812
Total Document
Costs



29,060
Employees
FTE



170,184,809
Office Documents
Produced



99,746,460
Production Documents
Produced



\$ 156,706,166
Total Document
Costs

EDAM® Top 25 Global Office & Production Document Costs

Since the 1970's, fossil fuels have commanded a consistent 60-70% share of the global power generation mix. Bloomberg NEF 2018 publication states that \$11.5 Trillion is being invested globally in new power generation capacity between 2018 and 2050, with \$8.4 Trillion of that going to wind and solar and a further \$1.5 Trillion to other zero-carbon technologies such as hydro and nuclear. All that investment in research and development creates a huge amount of information, data, and IP. Paper is still preferred for security and customer billing.



22,320
Employees
FTE



124,495,067
Office Documents
Produced



77,194,643
Production Documents
Produced



\$ 117,716,352
Total Document
Costs



21,817
Employees
FTE



114,993,631
Office Documents
Produced



69,062,749
Production Documents
Produced



\$ 107,061,398
Total Document
Costs



21,000
Employees
FTE



122,940,183
Office Documents
Produced



73,900,678
Production Documents
Produced



\$ 114,717,194
Total Document
Costs



20,957
Employees
FTE



100,960,636
Office Documents
Produced



63,193,367
Production Documents
Produced



\$ 95,807,127
Total Document
Costs



19,939
Employees
FTE



83,796,677
Office Documents
Produced



50,457,543
Production Documents
Produced



\$ 76,978,925
Total Document
Costs

EDAM® Top 25 Global Office & Production Document Costs

Bloomberg NEF experts see that by 2050, wind and solar technology provide almost 50% of total electricity globally, with hydro, nuclear and other renewables taking total zero-carbon electricity up to 71%. In 2050, they expect only 29% of the electricity production worldwide to result from burning fossil fuels, down from 63% in 2018. New competition from smart start-up companies are causing traditional fossil fuel generation utility companies to invest in new technology - software, systems, as well as staff to stay competitive.



16,749
Employees
FTE



86,249,597
Office Documents
Produced



52,539,793
Production Documents
Produced



\$ 81,160,693
Total Document
Costs



15,374
Employees
FTE



78,952,833
Office Documents
Produced



47,658,287
Production Documents
Produced



\$ 74,057,991
Total Document
Costs



12,700
Employees
FTE



69,523,485
Office Documents
Produced



37,797,103
Production Documents
Produced



\$ 63,231,178
Total Document
Costs



12,399
Employees
FTE



62,548,296
Office Documents
Produced



38,004,790
Production Documents
Produced



\$ 58,520,182
Total Document
Costs



11,657
Employees
FTE



57,847,694
Office Documents
Produced



36,208,078
Production Documents
Produced



\$ 54,894,874
Total Document
Costs

Additional EDAM® 2018 Global Utility Companies Researched

A2A	Dynegy
Abu Dhabi National Energy Company (TAQA)	Edison Group
Acea Group	Edison International
AES Corporation	Electric Power Development
AGL Energy	Emera
Alliant Energy Corporation	Empresas Publicas de Medellin (EPM Group)
Alpiq Holding AG	ENECO Holdings
Ameren Corporation	Energa Group
American Electric Power Company	Energen Corporation
ATCO	Entergy Corporation
Avangrid	EPCOR Utilities
AXPO Group	Eskom Holdings
Basin Electric Power Cooperative	Eversource Energy
Berkshire Hathaway Energy Company	EVN Group
BKW FMB Energie	EWE Group
Calpine Corporation	Federal Grid
CenterPoint Energy	FirstEnergy Corporation
CEZ Group	Fortis
China Longyuan Power Group	Fortum
China Resources Power Holdings	Georgia Power Company
Chugoku Electric Power	Great Plains Energy
CLP Holdings	Grupo CGE
CMS Energy Corporation	Hawaiian Electric Industries
Comision Federal de Electricidad	HK Electric Investments
Companhia Energética de Minas Gerais	Hokkaido Electric Power Company
Companhia Paranaense de Energia	Hokuriku Electric Power Company
Consolidated Edison	Hong Kong and China Gas Company
CPFL Energia	Huadian Power International
Datang International Power Generation	Hydro One
Dominion Energy	Hydro-Quebec
Drax Group	Instituto Costarricense de Electricidad (ICE)
DTE Energy Company	Israel Electric Corporation

Additional EDAM® 2018 Global Utility Companies Researched

Kyushu Electric Power Company
Los Angeles Department of Water & Power
Manila Electric Company
Manitoba Hydro Electric
MidAmerican Energy Holdings
National Fuel Gas Company
New Jersey Resources Corporation
NextEra Energy
NiSource
NRG Energy
NTPC (National Thermal Power Corporation)
NV Nuon Energy
OGE Energy Corporation
Ontario Power Generation
Orano
Origin Energy
Orsted
Osaka Gas Company
Perusahaan Gas Negara
PG&E Corporation
PGE Polska Grupa
Pinnacle West Capital
PNM Resources
Portland General Electric
Power Grid Corporation of India
PowerCo
PPL Corporation
Public Power Corporation
Public Service Enterprise Group
Puget Energy
Red Eléctrica Corporation
Reliance Infrastructure
Rosseti
RusHydro
Sacramento Municipal Utility District
Saudi Electricity Company
Scana Corporation
Sempra Energy
Shikoku Electric Power Company
Southwest Gas Holdings
Spire Energy
Statkraft
Tata Power Company
Tenaga Nasional
Tenaska Energy
Tennessee Valley Authority
Terna Group
Toho Gas
Tokyo Gas
TransAlta Corporation
TransCanada Corporation
UGI Corporation
Vattenfall
Vectren Corporation
Verbund Group
Vistra Energy Corp
WEC Energy Group
Westar Energy
WGL Holdings
Xcel Energy
YTL Corporation

EDAM® Cost Modeling

ALL Associates Group uses exhaustive research, mathematical and scientific processes, predictive analytics, and techniques to combine global data on employment and industry statistics. EDAM® databases and algorithms can compute the **fully burdened costs** of any document system, within any organization, anywhere in the world.

This Top 25 global utility companies summary report was generated using EDAM® Predictive Modeling Tools. To obtain a predictive profile of any one of these companies listed call **(919) 917-7600** or send a email to: edam@allassociates.com

Insights

- **Document Volumes**
 - Office & Production
- **Document Costs**
 - Print / Copy / Digital
- **Impact Analysis**
 - Energy & Resources
 - FTE Workforce Dynamics
 - Machine in Field (MIF)
 - Regulatory Impact Analysis

